SUBSTITUTE ABSTRACT

Salt-containing water is desalinated by first passing salt-containing water through a heat exchanger disposed in a basin containing solar-heated brine formed by several layers of water lying one above the other in the basin, each of the layers of water forming the brine having a higher salt content than the layer present there above. The heat exchanger is in the lowermost layer of water having a higher temperature than the temperature of the layers of water lying above the lowermost layer of water. The salt-containing water is heated in the basin by solar energy indirect heat exchange with the solar-heated brine to obtain heated salt-containing water. At least part of the heated salt-containing water is evaporated to obtain water vapor, and the water vapor is condensed to obtain desalinated water.